37. NOMENCLATURAL NOTES ON AN INDIAN PLANT

The genus *Senecio* L. finds world wide distribution except Antarctica. It has close affinities with the genus *Ligularia* Cass. The generic limits of the two may, however, be distinguished on the basis of following characters (Jeffrey *et al.* 1977, Jeffrey and Chen Yi Ling, 1984, Nordenstam and Rechinger 1989).

- 1a. Leaf-base exauriculate; margins of lamina not revolute. Filament column dilated at base. Anther collor balusterform with enlarged marginal basal cells; endothecial tissue, cells elongate. *Senecio*
- 1b. Leaves with vaginate sheathing bases; margins of lamina revolute. Filament column cylindric, not dilated at base. Anther collar cylindric or obconic, without enlarged marginal basal cells; endothecial tissue cell wall thickenings polarised, cells short...

 Ligularia

Based on above characters, many species of *Senecio* L. have recently been transferred to the genus *Ligularia* Cass. (Rao *et al.* 1988). *Senecio yakla* described by Clarke (1876) from Sikkim, takes its name from the pass known as Yak-La in East Sikkim. Hooker (1881) reduced it to the synonymy of *Senecio amplexicaulis* Wall. ex Clarke; the latter is presently being considered synonymous to *Ligularia amplexicaulis* DC. (Rao *et al.* 1988). Smith (1913) treated *S. yakla* as a distinct species mainly characterised in the involucral bracts being 16-18, acute or obtuse, *c.* 1 cm long, connate below, slightly pubescent

and ligule being 16-18, broadly obovate or elliptic, hardly exceeding the involucral bracts. In *S. amplexicaulis* Wall. ex Clarke the involucral bracts vary from 10-12 and ligule 7-8, exceeding involucral bracts, linear-lanceolate. To determine the taxonomic status and systematic position of *S. yakla* Clarke, we examined some specimens of both species at Central National Herbarium (CAL) and concluded that *S. yakla* deserves specific recognition as delimited by Smith (1913), and since it comes within the present generic limits of *Ligularia* Cass., it is proposed to transfer it to the latter as under:

Ligularia yakla (Clarke) V. Singh & P. Singh comb. nov.

Senecio yakla Clarke, Comp. Ind. 204. 1876; W.W. Smith, Rec. Bot. Surv. India 4: 384. 1913. S. amplexicaulis Hook. f., Fl. Brit. India 3: 348. 1881, pro parte, non Wall. ex Clarke 1876.

Specimen studied: INDIA: Sikkim; Changu, 3660 m 26th Oct. 1910, *Ribu & Rhomoo* 4370 (CAL); Chola range, 3960-4270 m, 22nd July 1910, *W.W. Smith* 3697 (CAL); Tanka la, 4570 m, 3rd Aug. 1892, *G.A. Gammie* 536 (CAL).

Distribution: India (Sikkim) endemic.

March 9, 1995

V. SINGH P. SINGH

Botanical Survey of India, Baluwakhani, Gangtok-737101, Sikkim.

REFERENCES

CLARKE, C.B. (1876): Compositae Indicae described at secus genus Benthamii Ordinatae. Calcutta.

HOOKER, J.D. (1881): Compositae. The Flora of British India, vol. 3. London.

JEFFREY, C. et. al. (1977): Generic and Sectional limits in Senecio. Kew Bull. 32: 47-67.

JEFFREY, C. & CHEN YI-LING (1984): Taxonomic studies on the tribe

Senecioneae (Compositae) of Eastern Asia. *Kew Bull. 39 (2)*: 205-446.

NORDENSTAM, B. & K.H. RECHINGER (1989): Compositae. *Flora Iranica* 164: 41-95.

RAO, R.R. et al. 1988): Flora Indicae Enumeratio Asteraceae. Calcutta. SMITH, W.W. (1913): The alpine and subalpine vegetation of Southeast Sikkim. Rec. Bot. Surv. India 4 (7): 384-385.

38. DESTRUCTION OF *CUSCUTA REFLEXA* ROXB. BY THE RHESUS MACAQUE *MACACA MULATTA* (ZIMMERMANN)

On the afternoon of 26th November 1993, I observed a troop of Rhesus Macaque *Macaca mulatta* (Zimmermann) feeding on *Cuscuta reflexa* Roxb. inside the Keoladeo National Park, Bharatpur, near the eastern wall of the park. Three large sized *Zizyphus mauritiana* Lamk. trees harboured a massive growth of the phanerogamic total stem parasitic twiner *Cuscuta*. Members of the macaque troops were present on all the three *Zizyphus* plants and were

plucking and devouring the Cuscuta tender growth.

It is worth placing on record Rhesus Macaque as one of the potential Cuscuta destroyers in nature.

March 12, 1994

SATISH KUMAR SHARMA Range Forest Officer, Aravalli Afforestation Programme, Jhadol (F.) Udaipur (Raj.)-313 702.